

Atty. Dkt. No. 02CR145/KE (047141-0292)

**REMARKS**

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claim 7 is currently being amended for certain informalities. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier. Claims 1-20 are now pending in this application.

**Claim Rejections under 35 U.S.C. § 102**

On page 2 of the Office Action dated March 4, 2008, Claims 15-17 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Publication No. 2002/0114292 ("Kawabata").

The Examiner stated that:

Kawabata et al. clearly disclose and show a communications system comprising:

a plurality of transceiver nodes configured to utilize a time division multiple access (fig. 1(a-d) terminal and (14 & 15) controllers), paragraph 72 (14 & 15 (TDMA controllers) – TDMA network with polarity of terminals)) structure to communicate between the transceiver nodes; and

the time division multiple access structure including a plurality of time slots (paragraph 77, lines 1-12) during which the transceiver nodes are configured to communicate data cells,

wherein cells transmitted from the transmission queue are selectively placed sequentially (paragraph 0032 (QOS)) into the retransmission queue (fig. 22 (S13 and S14), paragraph 0114) for later retransmission in response to the need for a retransmission (fig. 22 (S14, paragraph 0114), wherein the retransmission queue includes a head and a tail (paragraph 0023 (first-come, first-served)), wherein a first data cell is removed from the head

Atty. Dkt. No. 02CR145/KE (047141-0292)

transmission queue (paragraph 0028, lines 13-17 (accumulates until acknowledgment or timeout)) if receipt is acknowledged (paragraph 0028, lines 13-17 (receive reception acknowledgment)) and the first data cell is retransmitted if a time to return elapses (paragraph 0028, lines 13-17 (timeout)), wherein the first data cell is provided to the tail of the retransmit queue if retransmitted (fig. 22 (S13 and S14), paragraph 0114).

Applicants respectfully traverse the rejection.

Claim 15 is in independent form and recites, in combination with other elements, “wherein cells transmitted from the transmission queue are **selectively placed sequentially into the retransmission** queue for later retransmission in response to the need for a retransmission, ... wherein ... the first data cell is retransmitted if a time to retransmit elapses, wherein the **first data cell is provided to the tail of the retransmit queue if retransmitted.**” Claims 16-17 depend from independent Claim 15.

Kawabata does not identically disclose, “wherein cells transmitted from the transmission queue are **selectively placed sequentially into the retransmission** queue for later retransmission in response to the need for a retransmission, ... wherein ... the first data cell is retransmitted if a time to retransmit elapses, wherein the **first data cell is provided to the tail of the retransmit queue if retransmitted**” as recited in independent Claim 15.

Kawabata does not disclose “cells transmitted from the transmission queue are **selectively placed sequentially into the retransmission** queue” rather it discloses placing all of the data transmitted into “retransmission queue 7 (step S14), until the terminal station receives the reception acknowledgement 19 from the base station”. (See Kawabata, paragraph 0114). Furthermore, Kawabata does not disclose “the **first data cell is provided to the tail of the retransmit queue if retransmitted**” rather it discloses discarding the data in the retransmission queue after the retransmission. (See Kawabata, Figure 22, paragraph 0115-0116).

Therefore, the rejection of Claim 15 over Kawabata is improper. Claim 15 is patentable over Kawabata.

Atty. Dkt. No. 02CR145/KE (047141-0292)

Dependent Claims 16-17, which depend from independent Claim 15, are also patentable for at least the same reasons.

The Applicants respectfully request withdrawal of the rejection of Claims 15-17 under 35 U.S.C. § 102(b).

**Claim Rejections under 35 U.S.C. § 103**

On page 5 of the Office Action, Claims 1-7, 8-14 and 18-19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kawabata, in view of U.S. Patent No. 7,016,304 ("Chou").

With respect to Claims 1 and 8, the Examiner stated that:

Kawabata et al. clearly disclose and show a method communicating a data packet comprised of a plurality of data cells (Abstract (data)), the method using a transmit queue (fig. 13(2), paragraph 0027 (transmission queue)) and a retransmission queue (fig. 13 (7), paragraph 0027 (retransmission queue)), each of the transmit queue and retransmit que having a head and a tail (paragraph 0027 (first-come, first-served)) the method comprising:

transmitting a first data cell from the head of the transmit queue (fig. 22 (S13 and S14), paragraph 0114);

inserting the first data cell at the tail of the retransmit queue (paragraph 0023 (first-come, first-served)) if the first data cell is for transmission (fig. 22 (S13 and S14) paragraph 0114, lines 7-11);

removing a second data cell at the head of the retransmit queue if receipt has been acknowledged for the second data cell (fig. 22 (S215, S 17), paragraph 0028, lines 13-17 (remains to be accumulated until acknowledgment));

retransmitting the second data cell at the head of the retransmit queue (paragraph 0023 (first-come, first-served)) if a time to retransmit elapses (paragraph 0028, lines 13-17 (timeout)), wherein

Atty. Dkt. No. 02CR145/KE (047141-0292)

the second data cell is provided to the tail of the retransmit queue if retransmitted (fig. 22 (S13 and S14) paragraph 0114).

However, the Examiner acknowledged that Kawabata does not disclose:

retransmitting if a time to retransmit elapses.

The Examiner stated that Chou discloses:

retransmitting the second data cell at the head of the retransmit queue (column 3, lines 64-66 (FIFO)) if a time to retransmit elapses (column 4, lines 41-46 (retry after timeout)), wherein the second data cell is provided to the tail of the retransmission queue if retransmitted (column 5, lines 24-26 (store at the tail of queue after transmission)).

The Examiner concluded that:

it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a retransmission method, as taught by Kawabata and demonstrate retransmitting after time to retransmit elapses, as taught by Chou et al., so that the control of communication can be improved.

Claim 1 is in independent form and recites, in combination with other elements, "inserting the first data cell at the tail of the retransmit queue if the first data cell is for retransmission ... retransmitting the second data cell at the head of the retransmit queue if a time to retransmit elapses". Claims 2-7 depend from independent Claim 1.

Claim 8 is in independent form and recites, in combination with other elements, "a means for inserting the first data cell at the tail of the retransmit queue in response to a HBH ACK signal ... a means ... for retransmitting the second data cell at the head of the retransmit queue if a time to retransmit occurs". Claims 9-14 depend from independent Claim 8.

Applicants respectfully traverse the rejection. Independent Claims 1 and 8 would not have been obvious in view of Kawabata, alone or in any proper combination with Chou under 35 U.S.C. § 103(a). Kawabata alone or in any proper combination with Chou does not disclose,

Atty. Dkt. No. 02CR145/KE (047141-0292)

teach or suggest, in combination with other elements, “inserting the first data cell at the tail of the retransmit queue **if the first data cell is for retransmission**”, as recited in Claims 1 and 8. Both Kawabata and Chou disclose copying all transmitted data to the retransmission queue. (See Kawabata, paragraph 0114; Chou, col. 3, lines 58-61). This is not the same as “inserting the first data cell at the tail of the retransmit queue **if the first data cell is for retransmission**” as recited in Claims 1 and 8.

Kawabata alone or in any proper combination with Chou does not disclose, teach or suggest, in combination with other elements, “retransmitting the second data cell at the head of the retransmit queue if a time to retransmit elapses”, as recited in Claims 1 and 8. Specifically, the Examiner acknowledged that Kawabata does not disclose retransmitting the second data cell at the head of the retransmit queue if a time to retransmit elapses. However, Chou does not cure the deficiencies of Kawabata. Chou discloses a RetryTimer used to initiate another Link Level Retry Request (LLRREQ) to the sending agent. (Chou, col. 4, lines 42-46). When LLRREQ is received, “retry control module 32 will stop enqueueing new flits and command retry queue 42 to rollback to the flit in error and start re-sending from that flit onward.” (Chou, col. 4, lines 6-9). This is not the same as “retransmitting the second data cell **at the head of the retransmit queue** if a time to retransmit elapses” as recited in Claims 1 and 8.

To transform Kawabata and Chou into the subject matter of Claims 1 and 8, would require still further modification, and such modification is taught only by the Applicants’ own disclosure. The suggestion to make the combination of Kawabata and Chou has been taken from the Applicants’ own specification (using hindsight), which is improper.

Independent Claims 1 and 8 would not have been obvious in view of Kawabata and/or Chou. The rejection of Claims 1 and 8 over Kawabata in view of Chou under 35 U.S.C. § 103(a) is improper. Therefore, Claims 1 and 8 are patentable over Kawabata in view of Chou.

Dependent Claims 2-7 and 9-14, which depend from independent Claims 1 and 8, respectively, are also patentable for at least the same reasons.

Atty. Dkt. No. 02CR145/KE (047141-0292)

Applicants respectfully request withdrawal of the rejection of Claims 1-14 under 35 U.S.C. § 103(a).

On pages 9-10 of the Office Action, Claim 20 was rejected under 35 § U.S.C. 103(a) as being unpatentable over Kawabata, in view of U.S. Patent No. 7,145,869 ("Kadambi").

Claim 20 depends from independent Claim 15 and is allowable for at least the same reasons as Claim 15. Kadambi does not cure the deficiencies of Kawabata. Since Kawabata and Kadambi do not disclose, teach or suggest the limitations of Claim 20, Applicants respectfully request withdrawal of the rejection of Claim 20 under 35 U.S.C. § 103(a).

\* \* \*

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Atty. Dkt. No. 02CR145/KE (047141-0292)

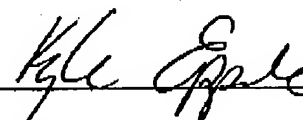
The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 18-1722. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 18-1722.

Respectfully submitted,

Date

6/4/2008

By



ROCKWELL COLLINS, INC.  
400 Collins Road, NE  
Cedar Rapids, IA 52498  
Telephone: (319) 295-8280  
Facsimile: (319) 295-8777  
Customer No. 26383

Kyle Epple  
Attorney for Applicant  
Registration No. 34,155